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10/527,328

09/22/2005

Koji Okomori

159-87

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08/08/2007

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT

PAPER NUMBER

1774

MAIL DATE

DELIVERY MODE

08/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/527,328

Applicant(s)

OKOMORI ET AL.

Examiner

Betelhem Shewareged

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1774

DETAILED ACTION

1. Applicant's response filed on 05/01/2007 has been fully considered. Claims 1-5 are canceled, claims 6-9 are added, and claims 6-9 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kai et al. (JP 2002-088679) in view of Matsumura et al. (JP 2002-161494), Ryu et al. (US 2001-288690) and Shay et al. (US 5,478,602).

4. Kai discloses a coated paper for gravure printing comprising a coated layer having an adhesive and a pigment on a base paper, wherein kaolin having a particle size in a range of 0.4-4.2 μm is contained in an amount of 65% or more based on the volume, is contained as the pigment in an amount of 50 parts by weight or more per 100 parts by weight of the pigment (abstract). Kai further discloses that the organic pigment may be contained in the coating composition [0014]. Kai does not disclose hollow pigment as the organic pigment.

5. Matsumura teaches a gravure printing paper containing a paper and a coating layer containing hollow organic pigment provided on the paper (abstract), wherein the hollow pigment has a particle size of 0.2-0.5 μm [0011].

Art Unit: 1774

6. Kai and Matsumura are analogous art because they are from the same field of endeavor that is the gravure coated paper art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the hollow organic pigment of Matsumura with the invention of Kai so as to improve the glossiness property of the layer, provide precise coating and improve drying property of the layer ([0012] of Matsumura).

7. With respect to claim 8, at the time of the invention, it is notoriously known to add amorphous silicate in the paper so as to control flexibility while retaining mechanical strength (see [0010] of Ryu).

8. Kai teaches coating the base paper at a coating speed of 500m/min. However, Shay teaches a coated paper for gravure printing, wherein the coating is provided at a coating speed of 4000ft/min [1219m/min] (col. 14, line 40).

9. Kai and Shay are analogous art because they are from the same field of endeavor that is the coated paper art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the coating at a higher coating speed so as to reduce the water forced into the substrate (col. 13, lines 24-25 of Shay), and to increase production of the coated paper without damaging.

10. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kai et al. (JP 2002-088679) in view of Sasaki et al. (JP 11-279990), Ryu et al. (US 2001-288690) and Shay et al. (US 5,478,602).

Art Unit: 1774

11. Kai discloses a coated paper for gravure printing comprising a coated layer having an adhesive and a pigment on a base paper, wherein kaolin having a particle size in a range of 0.4-4.2 μm is contained in an amount of 65% or more based on the volume, is contained as the pigment in an amount of 50 parts by weight or more per 100 parts by weight of the pigment (abstract). Kai further discloses that the organic pigment may be contained in the coating composition [0014]. Kai does not disclose hollow pigment as the organic pigment.

12. Sasaki teaches a gravure printing paper containing a paper and a coating layer containing hollow organic pigment provided on the paper (abstract), wherein the hollow pigment has a particle size of 0.4-2.0 μm [0016].

13. Kai and Sasaki are analogous art because they are from the same field of endeavor that is the gravure coated paper art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the hollow organic pigment of Sasaki with the invention Kai so as to enhance the ink receiving property of the layer.

14. With respect to claim 8, at the time of the invention, it is notoriously known to add amorphous silicate in the paper so as to control flexibility while retaining mechanical strength (see [0010] of Ryu).

15. Kai teaches coating the base paper at a coating speed of 500m/min. However, Shay teaches a coated paper for gravure printing, wherein the coating is provided at a coating speed of 4000ft/min [1219m/min] (col. 14, line 40).

Art Unit: 1774

16. Kai and Shay are analogous art because they are from the same filed of endeavor that is the coated paper art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the coating at a higher coating speed so as to reduce the water forced into the substrate (col. 13, lines 24-25 of Shay), and to increase production of the coated paper without damaging.

17. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kai et al. (JP 2002-088679) in view of Hayashi et al. (JP 06-235194), Ryu et al. (US 2001-288690) and Shay et al. (US 5,478,602).

18. Kai discloses a coated paper for gravure printing comprising a coated layer having an adhesive and a pigment on a base paper, wherein kaolin having a particle size in a range of 0.4-4.2 gm is contained in an amount of 65% or more based on the volume, is contained as the pigment in an amount of 50 parts by weight or more per 100 parts by weight of the pigment (abstract). Kai further discloses that the organic pigment

19. may be contained in the coating composition [0014]. Kai does not disclose hollow pigment as the organic pigment.

20. Hayashi teaches a gravure printing paper containing a paper and a coating layer containing hollow organic pigment provided on the paper (abstract), wherein the hollow pigment has a particle size of 0.5-3.0 um [0004].

21. Kai and Hayashi are analogous art because they are from the same field of endeavor that is the gravure coated paper art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the hollow organic

Art Unit: 1774

pigment of Hirose with the invention of Kai so as to enhance the printing property and glossiness of the layer.

22. With respect to claim 8, at the time of the invention, it is notoriously known to add amorphous silicate in the paper so as to control flexibility while retaining mechanical strength (see [0010] of Ryu).

23. Kai teaches coating the base paper at a coating speed of 500m/min. However, Shay teaches a coated paper for gravure printing, wherein the coating is provided at a coating speed of 4000ft/min [1219m/min] (col. 14, line 40).

24. Kai and Shay are analogous art because they are from the same filed of endeavor that is the coated paper art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the coating at a higher coating speed so as to reduce the water forced into the substrate (col. 13, lines 24-25 of Shay), and to increase production of the coated paper without damaging.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 1774

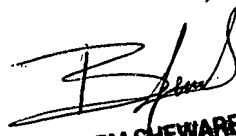
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on MAX FLEX.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BS
August 4, 2007.


BETELHEM SHEWAREGED
PRIMARY EXAMINER